

Monday, December 14, 2020

Attn: Ms. Jennifer Atkins **AECOM** 250 Apollo Drive Chelmsford, MA 01824

Project ID: GULF CHELSEA TERMINAL 60597375-0500

SDG ID: GCH26129

Sample ID#s: CH26129 - CH26130

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Laboratory Director

NELAC - #NY11301

CT Lab Registration #PH-0618

MA Lab Registration #M-CT007

ME Lab Registration #CT-007

NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003

NY Lab Registration #11301

PA Lab Registration #68-03530

RI Lab Registration #63 **UT Lab Registration #CT00007**

VT Lab Registration #VT11301



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

December 14, 2020

SDG I.D.: GCH26129

Project ID: GULF CHELSEA TERMINAL 60597375-0500

Client Id	Lab Id	Matrix
OUTFALL 003	CH26129	SW DISCHARGE
TRIP BLANK	CH26130	SW DISCHARGE



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Analysis Report

December 14, 2020

FOR: Attn: Ms. Jennifer Atkins

AECOM

250 Apollo Drive

Chelmsford, MA 01824

Sample InformationCustody InformationDateTimeMatrix:SW DISCHARGECollected by:12/07/207:20Location Code:AECOME-GULFReceived by:B12/07/2014:43

Rush Request: 72 Hour Analyzed by: see "By" below

P.O.#: Laboratory Data

SDG ID: GCH26129 Phoenix ID: CH26129

Project ID: GULF CHELSEA TERMINAL 60597375-0500

Client ID: OUTFALL 003

		RL/					
Parameter	Result	PQL	Units	Dilution	Date/Time	Ву	Reference
Oil and Grease by EPA 1664A	< 1.4	1.4	mg/L	1	12/10/20	MSF	EPA 1664
рН	7.77	1.00	pH Units	1	12/07/20 19:45	AP/EG	SM4500-H B-11
Total Suspended Solids	19	5.0	mg/L	1	12/08/20	LS/QH	SM 2540D-11
Semi-Volatile Extraction	Completed				12/07/20	P/D	SW3520C
Aromatic Volatiles w/N	<u>apthalene</u>						
Benzene	ND	1.0	ug/L	1	12/07/20	МН	E624.1
Naphthalene	ND	1.0	ug/L	1	12/07/20	MH	E624.1
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	103		%	1	12/07/20	MH	70 - 130 %
% Bromofluorobenzene	96		%	1	12/07/20	MH	70 - 130 %
% Dibromofluoromethane	105		%	1	12/07/20	MH	70 - 130 %
% Toluene-d8	100		%	1	12/07/20	MH	70 - 130 %
Semivolatiles by SIM, P	PAH						
Benzo(a)pyrene	ND	0.02	ug/L	1	12/08/20	WB	E625.1
Naphthalene	ND	0.10	ug/L	1	12/08/20	WB	E625.1
QA/QC Surrogates							
% 2-Fluorobiphenyl	70		%	1	12/08/20	WB	40 - 140 %
% Nitrobenzene-d5	80		%	1	12/08/20	WB	40 - 140 %
% Terphenyl-d14	57		%	1	12/08/20	WB	40 - 140 %

Project ID: GULF CHELSEA TERMINAL 60597375-0500 Phoenix I.D.: CH26129

Client ID: OUTFALL 003

RL/

Parameter Result PQL Units Dilution Date/Time By Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time

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Phyllis Shiller, Laboratory Director

December 14, 2020

Reviewed and Released by: Rashmi Makol, Project Manager



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Analysis Report

December 14, 2020

FOR: Attn: Ms. Jennifer Atkins

AECOM

250 Apollo Drive

Chelmsford, MA 01824

Sample Information **Custody Information** <u>Date</u> <u>Time</u> SW DISCHARGE Collected by: 12/07/20 7:00 Matrix: Received by: **Location Code: AECOME-GULF** В 12/07/20 14:43 Rush Request: Standard Analyzed by: see "By" below

P.O.#: 112185

Laboratory Data

SDG ID: GCH26129

Phoenix ID: CH26130

Project ID: GULF CHELSEA TERMINAL 60597375-0500

Client ID: TRIP BLANK

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	Ву	Reference
Aromatic Volatiles w/Na	apthalene						
Benzene	ND	1.0	ug/L	1	12/07/20	МН	E624.1
Naphthalene	ND	1.0	ug/L	1	12/07/20	MH	E624.1
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	103		%	1	12/07/20	MH	70 - 130 %
% Bromofluorobenzene	98		%	1	12/07/20	MH	70 - 130 %
% Dibromofluoromethane	106		%	1	12/07/20	MH	70 - 130 %
% Toluene-d8	100		%	1	12/07/20	МН	70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

TRIP BLANK INCLUDED.

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Phyllis Shiller, Laboratory Director

December 14, 2020

Reviewed and Released by: Rashmi Makol, Project Manager



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QA/QC Report

December 14, 2020

Additional: LCS acceptance range is 85-115% MS acceptance range 75-125%.

QA/QC Data

SDG I.D.: GCH26129 Sample Dup Dup LCS LCSD LCS MS MSD MS Rec RPD Blank RL Result Result RPD. % % **RPD** % % RPD Limits Limits Parameter QA/QC Batch 556147 (mg/L), QC Sample No: CH25463 (CH26129) Oil and Grease by EPA 1664A BRL 1.4 96.0 97.0 1.0 85 - 115 20 Comment: A Blank spike was performed instead of a matrix spike Additional: MS acceptance range 75-125%. QA/QC Batch 555783 (mg/L), QC Sample No: CH25527 (CH26129) **Total Suspended Solids** 2.5 <3.3 <3.3 NC 98.0 85 - 115 QA/QC Batch 555793 (pH), QC Sample No: CH25967 (CH26129) 7.04 98.5 85 - 115 20 Comment:



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QA/QC Report

December 14, 2020

QA/QC Data

<u>QA/QC Data</u>	SDG 1.D.: GCH26129
	% %

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	Rec Limits	RPD Limits	
QA/QC Batch 555710 (ug/L), Q0	C Samp	le No: CH25650 (CH26129)									
Semivolatiles by SIM, PA	<u>H</u>										
Benzo(a)pyrene	ND	0.02	80	88	9.5	65	56	14.9	40 - 140	20	
Naphthalene	ND	0.50	74	59	22.6	70	70	0.0	40 - 140	20	r
% 2-Fluorobiphenyl	66	%	74	68	8.5	68	67	1.5	40 - 140	20	
% Nitrobenzene-d5	56	%	85	64	28.2	80	82	2.5	40 - 140	20	r
% Terphenyl-d14	104	%	103	103	0.0	85	79	7.3	40 - 140	20	
Comment:											
Additional 8270 criteria: 10% of co acceptance range for aqueous sar		s can be outside of acceptance criter 0-110%, for soils 30-130%)	ia as lor	ng as rec	overy is	at least	10%. (Ad	cid surro	ogates		
QA/QC Batch 555814 (ug/L), Q	C Samp	le No: CH26130 (CH26129, CH2	26130)								
Volatiles											
Benzene	ND	0.70	94	97	3.1	91	94	3.2	65 - 135	20	
Naphthalene	ND	1.0	98	100	2.0	94	101	7.2	70 - 130	30	
% 1,2-dichlorobenzene-d4	103	%	101	100	1.0	100	100	0.0	70 - 130	30	
% Bromofluorobenzene	97	%	101	101	0.0	100	101	1.0	70 - 130	30	
% Dibromofluoromethane	106	%	104	102	1.9	102	102	0.0	70 - 130	30	
% Toluene-d8	102	%	99	97	2.0	100	100	0.0	70 - 130	30	
Comment:											
A blank MS/MSD was analyzed wi	th this ba	atch.									

r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference

Phyllis/Shiller, Laboratory Director

December 14, 2020

Monday, December 14, 2020

Sample Criteria Exceedances Report GCH26129 - AECOME-GULF

Criteria: None State: MA

RL Analysis SampNo Acode Phoenix Analyte Criteria Units

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

^{***} No Data to Display ***



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Analysis Comments

December 14, 2020 SDG I.D.: GCH26129

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

Cooler: Year No	Temp] - D°C Pg of		1-978-905-2112 jennifer.atkins@aecom.com	O: 112185	This section MUST be	completed with		* * *	iliogo ij to strij.	uoos Julo	MOGA	Selected Sold Sold Sold Sold Sold Sold Sold Sol								<u>a</u>	on Excel	GIS/Key	Other	Data Package Tier II Checklist		- SURCHARGE APPLIES
Coolant:	Temp Data Delive	Fax:	Email: jennifer.atkins@	Project P.O.			-	*	CERT	OLOLOLO	Jaile II.	07 14 0x	3 3							WA	MCP Certification		GW-3	Ec S-2	S-3 MWRA eSMART Other	elected: MA
	ORD	ster, CT 06040	645-0623 26	nal / 60597375-0500						1000	7 100	\$05 100 100 NO								ંગા	Direct Exposure LRCP Cert (Residential) GW Protection	<u> </u>	r GA Mobility	GB Mobility Residential DEC	UC DEC	State where samples were collected:
	CHAIN OF CUSTODY RECORD	587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040	()	Project: Gulf Chelsea Terminal / 60597375-0500	Report to: Jennifer Atkins	Invoice to: AECOM	QUOTE # AE012319RM		, s		Tradicion with	100 114 000 000 000 000 000 000 000 000	×	×						Time:	\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}{2}\)	Sh: 1/1	Other	STACE STACES		APPLIES
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								a ci	ate:	ww=Waste		Date Sampled	12-7-20	12-7-20								The		Sample with		
			, Inc.					troilition 1		irface Water oil SD=Solic		Sample Matrix	NS.									74/1	.96	sample		
		TOE/NIX W	Environmental Laboratories, Inc.	AECOM	250 Apollo Drive	Chelmsford, MA 01824	Jennifer Atkins	Client Salmile Mermation I dontification	My from	Matrix Code: UW=DMRING Water GW=Ground Water SW=Surface Water WW=Waste Water BW=Raw Vater SE=Sediment SL=Sludge S=Soil SD=Soild W=Wipe OIL=Oil		Customer Sample Identification	Outfall 003	Trip Blank					7	Accepted by:		ANT -	Comments. Special Requirements or Requisitions	Please run TSS s	3 Day TAT!	
	- Virginia		Environme	Customer:	Address:		. •		Sampler's Signature	Matrix Code: DW=Drinking Water RW=Raw Water SE B=Bulk L=Liquid		PHOENIX USE ONLY SAMPLE #	20124	20130					1	Relinquished by	Mind		Comments. Special	* Pier	ო ძ	